**What Is Claimed Is:**

1       1.       A method that facilitates dynamic delivery of service profiles to a

2       client, comprising:

3               performing a discovery operation to allow the client to discover new

4       services on a network;

5               if a new service is discovered for which the client does not possess a

6       service profile, causing the client to obtain the service profile from the new

7       service; and

8               causing the service profile to be installed on the client to enable the client

9       to use the new service.


1       2.       The method of claim 1, wherein causing the client to obtain the

2       service profile involves:

3               causing the client to send a request for the service profile to the new

4       service; and

5               causing the client to receive the service profile from the new service.


1       3.       The method of claim 1, wherein the service profile includes code,

2       and wherein causing the service profile to be installed on the client involves

3       causing the code to be installed on the client.


1       4.       The method of claim 1,

2               wherein the service profile includes a specification that describes how to

3       use the new service; and

4               wherein causing the service profile to be installed on the client involves,

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5              causing code to be generated to implement the

6      specification, and

7              causing the code to be installed on the client.


1      5.      The method of claim 1, wherein the service profile is encoded in a

2      universal form that can be executed by different types of clients.


1      6.      The method of claim 1,

2      wherein there exist different service profile implementations for different

3      types of clients; and

4              wherein causing the client to obtain the service profile involves,

5                      communicating characteristics of the client to the new

6              service,

7                      allowing the new service to select a service profile

8              implementation for the client based on the characteristics of the

9              client, and

10                     allowing the new service to send the selected service profile

11             implementation to the client.


1      7.      The method of claim 1, wherein causing the client to obtain the

2      service profile from the new service involves executing a dynamic extension

3      profile, which implements a standard protocol that enables the client to acquire

4      any profile the client needs at the time the profile is needed.


1      8.      The method of claim 1,

2              wherein performing the discovery operation involves using the Bluetooth

3      Service Discovery Protocol (SDP); and

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4      wherein the client and the new service communicate using the Bluetooth

5    networking standard.


1      9.    The method of claim 1, wherein the service profile can define a

2    service-specific Application Programming Interface (API).


1      10.    The method of claim 1, wherein the service profile implements a

2    domain-specific protocol stack associated with the new service.


1      11.    A computer-readable storage medium storing instructions that

2    when executed by a computer cause the computer to perform a method that

3    facilitates dynamic delivery of service profiles to a client, the method comprising:

4      performing a discovery operation to allow the client to discover new

5    services on a network;

6      if a new service is discovered for which the client does not possess a

7    service profile, causing the client to obtain the service profile from the new

8    service; and

9      causing the service profile to be installed on the client to enable the client

10    to use the new service.


1      12.    The computer-readable storage medium of claim 11, wherein

2    causing the client to obtain the service profile involves:

3      causing the client to send a request for the service profile to the new

4    service; and

5      causing the client to receive the service profile from the new service.

1        13.     The computer-readable storage medium of claim 11, wherein the

2    service profile includes code, and wherein causing the service profile to be

3    installed on the client involves causing the code to be installed on the client.


1        14.     The computer-readable storage medium of claim 11,

2        wherein the service profile includes a specification that describes how to

3    use the new service; and

4        wherein causing the service profile to be installed on the client involves,

5                causing code to be generated to implement the

6           specification, and

7                causing the code to be installed on the client.


1        15.     The computer-readable storage medium of claim 11, wherein the

2    service profile is encoded in a universal form that can be executed by different

3    types of clients.


1        16.     The computer-readable storage medium of claim 11,

2        wherein there exist different service profile implementations for different

3    types of clients; and

4        wherein causing the client to obtain the service profile involves,

5                communicating characteristics of the client to the new

6           service,

7                allowing the new service to select a service profile

8           implementation for the client based on the characteristics of the

9           client, and

10                allowing the new service to send the selected service profile

11           implementation to the client.

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1         17.     The computer-readable storage medium of claim 11, wherein

2  causing the client to obtain the service profile from the new service involves

3  executing a dynamic extension profile, which implements a standard protocol that

4  enables the client to acquire any profile the client needs at the time the profile is

5  needed.


1         18.     The computer-readable storage medium of claim 11,

2         wherein performing the discovery operation involves using the Bluetooth

3  Service Discovery Protocol (SDP); and

4         wherein the client and the new service communicate using the Bluetooth

5  networking standard.


1         19.     The computer-readable storage medium of claim 11, wherein the

2  service profile can define a service-specific Application Programming Interface

3  (API).


1         20.     The computer-readable storage medium of claim 11, wherein the

2  service profile implements a domain-specific protocol stack associated with the

3  new service.


1         21.     An apparatus that facilitates dynamic delivery of service profiles to

2  a client, comprising:

3         a discovery mechanism configured to perform a discovery operation that

4  allows the client to discover new services on a network;

5         a profile transfer mechanism, wherein if a new service is discovered for

6  which the client does not possess a service profile, the profile transfer mechanism

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7   is configured to cause the service profile to be transferred from the new service to

8   the client; and

9           an installation mechanism configured to cause the service profile to be

10  installed on the client to enable the client to use the new service.


1           22.     The apparatus of claim 21, wherein the profile transfer mechanism

2   is configured to:

3           cause the client to send a request for the service profile to the new service;

4   and to

5           cause the client to receive the service profile from the new service.


1           23.     The apparatus of claim 21, wherein the service profile includes

2   code, and wherein the installation mechanism is configured to cause the code to

3   be installed on the client.


1           24.     The apparatus of claim 21,

2           wherein the service profile includes a specification that describes how to

3   use the new service; and

4           wherein the installation mechanism is configured to,

5                   cause code to be generated to implement the specification,

6           and to

7                   cause the code to be installed on the client.


1           25.     The apparatus of claim 21, wherein the service profile is encoded

2   in a universal form that can be executed by different types of clients.


1           26.     The apparatus of claim 21,

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2         wherein there exist different service profile implementations for different

3    types of clients; and

4         wherein the profile transfer mechanism is configured to,

5                 communicate characteristics of the client to the new

6                 service,

7                 allow the new service to select a service profile

8                 implementation for the client based on the characteristics of the

9                 client, and to

10                allow the new service to send the selected service profile

11                implementation to the client.


1      27.    The apparatus of claim 21, wherein the profile transfer mechanism

2    is configured to execute a dynamic extension profile, which implements a

3    standard protocol that enables the client to acquire any profile the client needs at

4    the time the profile is needed.


1      28.    The apparatus of claim 21,

2         wherein the discovery mechanism uses the Bluetooth Service Discovery

3    Protocol (SDP); and

4         wherein the client and the new service communicate using the Bluetooth

5    networking standard.


1      29.    The apparatus of claim 21, wherein the service profile can define a

2    service-specific Application Programming Interface (API).


1      30.    The apparatus of claim 21, wherein the service profile implements

2    a domain-specific protocol stack associated with the new service.

1       31.    A device configured to dynamically deliver a service profile to a

2  client to enable the client to use a service provided by the device, comprising:

3        the device configured to provide the service;

4        a memory within the device containing the service profile that enables

5  clients to use the service provided by the device;  and

6        a profile transfer mechanism configured to transfer the service profile to

7  the client on demand.


1       32.    The device of claim 31, further comprising a discovery mechanism

2  configured to perform a discovery operation that allows devices to discover each

3  other.

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